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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,055	12/18/2001	Shu-Woei Chiou	A34893	1991
21003	7590	03/16/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			CRANE, SARA W	
			ART UNIT	PAPER NUMBER
			2811	
DATE MAILED: 03/16/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,055

Applicant(s)

CHIOU ET AL.

Examiner

Sara W. Crane

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-17 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-8, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jewell in view of Komoto et al.

With respect to claims 1 and 17, Jewell teaches a light emitting device (figure 1) which may be an LED (column 6, line 23). The device is located on a Bragg reflector layer 16 (column 14, lines 42-54). Column 14, line 52 states that layers 30 are oxidizable, and column 6, line 31, makes it clear that the oxidizable layers are oxidized during the process of making the device. The oxidized layers as described (column 6, lines 57-60) would inherently be insulating to current flow, because oxide is an insulator. The structure described is epitaxial because overlying layers are grown on underlying layers. The structure of the LED, including n and p type layers, with portions of such layers exposed to electrodes, would be as shown in the Jewell figures. Alternatively, Komoto et al. is relied upon to teach the specific layer structure of an LED, as in Komoto figure 100, which would have been obvious in order to produce an LED as desired explicitly by Jewell. With respect to claims 3-5, AlGaAs and InAlGaAsP are listed in the material at the bottom of Jewell column 6. (InAlGaAsP would include InAlP.) With respect to claim 8, it would have been obvious to optimize Al content to optimize oxidation properties as desired by Jewell. With respect to claim 8, the process described has not been shown to give rise to structure distinct from that of Jewell.

Conclusion

Applicant's remarks have been considered, but are moot in view of the new reference.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. (The new reference of Jewell was cited to show the layers which are both oxidizable and, which when oxidized would be current insulating.) Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Crane, whose telephone number is (571) 272-1652.

The fax phone number for this Group is (571) 272-1652.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (703) 308-0956.

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A handwritten signature in black ink, reading "Sara W. Crane". The signature is written in a cursive style with a large, looped "S" and a distinct "W".

Sara W. Crane
Primary Examiner
Art Unit 2811